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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/728,857	12/01/2000	Gary W. Kwong	56208USA8A	4252
32692	7590	10/24/2003	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY			JUSKA, CHERYL ANN	
PO BOX 33427			ART UNIT	
ST. PAUL, MN 55133-3427			PAPER NUMBER	

1771

DATE MAILED: 10/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/728,857	Applicant(s) KWONG ET AL.	
	Examiner Cheryl Juska	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14,29,31,32,34-41 and 53-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14,31,32,34-41 and 53-55 is/are rejected.
- 7) ☒ Claim(s) 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on July 24, 2003, has been entered. Claims 1-13, 15-28, 30, 33, and 42-52 have been cancelled, while claims 14, 31, 34, and 36-41 have been amended as requested. New claims 53-55 have been added. Thus, the pending claims are 14, 29, 31, 32, 34-41, and 53-55.
2. The cancellation of said claims renders moot the claim objection set forth in section 4 of the last Office Action, the 112, 2nd rejection set forth in section 5-7, and the prior art rejections set forth in sections 9-12 and 14. Additionally, the prior art rejection set forth in section 13 is hereby withdrawn due to the amendment to claim 14.

Claim Objections

3. Claim 29 is objected to for being dependent upon cancelled claim 28. Appropriate correction is required. Said claim is not further examined on the merits.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claim 14, 31, 32, and 34-36 are rejected under 35 USC 103(a) as being unpatentable over US 4,240,943 issued to Sugawara et al. in view of US 5,073,442 issued to Knowlton et al., US 3,632,419 issued to Horie et al., and US 5,770,656 issued to Pechhold.

Claim 14 was previously rejected under 102/103 by the cited Sugawara patent. Said claim has been amended to delete the reference to the anti-soiling agent and to limit the stainblocker to a sulfonated aromatic polymer, an acrylic acid copolymer, and a copolymer of an ethylenically unsaturated monomer and maleic anhydride. As noted in the last Office Action Sugawara teaches the claimed textile finishing composition comprising a water dispersible urethane (col. 1, lines 6-9 and 65-68; col. 2, lines 51-56; and col. 2, lines 22-42 and 57-64). Sugawara also teaches additives, such as antistatic agents, stain preventing agents, and softeners (col. 3, lines 57-61).

Sugawara is silent, however, with respect to specific stain preventing agents. The presently claimed stainblockers are well known in the art. For example, Knowlton discloses a soil and/or stain resistant treatment for wool or nylon fabrics comprising sulfonated resins, such as sulfonated phenolic compounds (abstract). Additionally, Horie discloses a method of imparting a durable soil-resistant finish to polyester or nylon fabrics comprising applying a composition including a polymer hydrosol such as polymethacrylic acid and a melamine-formaldehyde resin (abstract). Furthermore, Pechhold discloses an ester formed from a copolymer of maleic anhydride and an alpha-olefin monomer for treatment of a fabric for soil and stain resistance (abstract and col. 4, lines 28-33).

Since Sugawara is silent with respect to specific stain preventing agents, one must look to the prior art to select a suitable agent. Thus, it would have been obvious to one skilled in the art

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to employ known stain preventing agents, such as those evidenced by Knowlton, Horie, and Pechhold, in the Sugawara textile finishing composition in order to enhance the soil and stain resistance of a fabric. Therefore, claims 14, 31, 32, and 34-36 are rejected over the cited prior art.

6. Claims 41 and 53 are rejected under 35 USC 103(a) as being unpatentable over the cited Sugawara, Knowlton, Horie, and Pechhold references as applied to claim 14 above.

Although Sugawara teaches the use of a stain preventing agent, the reference is silent with respect to the use of said stain preventing agent in conjunction with an anti-soiling agent. However, it is noted that the terms soil/ stain preventing and soil/stain resistant or anti-soil/anti-stain are used interchangeable in the art of textiles. For example, what applicant calls a stain blocker, Knowlton, Horie, and Pechhold call soil/stain-resistant. Thus, it would have been obvious to one skilled in the art to employ one or more of the known agents for preventing or blocking stains or soiling. It has been held obvious to combine two compositions each of which is taught by prior art to be useful for the same purpose in order to form a third composition that is to be used for very same purpose. The idea of combining them flows logically from their having been individually taught in prior art. Thus, the claims which are no more than mixing together of two conventional compositions are set forth as obvious subject matter. *In re Kerkhoven*, 205 USPQ 1069. Therefore, claims 41 and 53 are rejected.

7. Claims 54 and 55 are rejected under 35 USC 103(a) as being unpatentable over the cited Sugawara patent in view of US 5,370,919 issued to Fieuws et al.

Claims 37 and 38 are rejected under 35 USC 103(a) as being unpatentable over the cited Sugawara, Knowlton, Horie, and Pechhold references as applied to claim 53 above, and in further view of US 5,370,919 issued to Fieuws et al.

Sugawara does not explicitly teach the claimed anti-soiling agents, but does teach the use of a stainblocker. However, as noted above, it would have been obvious to one skilled in the art to employ more than one soil or stain resistant agent in order to improve the soiling characteristics of the invention. The presently claimed anti-soiling agents are well known in the art. For example, Fieuws teaches a treatment composition comprising an anti-soiling agent, such as colloidal alumina or silica (col. 7, lines 1-5). Thus, it would have been obvious to one skilled in the art to add an anti-soiling agent as taught by Fieuws to the Sugawara composition in order to improve the soiling resistance of the finishing composition. Therefore, claims 54 and 55 are rejected.

8. Claim 39 is rejected under 35 USC 103(a) as being unpatentable over the cited Sugawara, Knowlton, Horie, and Pechhold references as applied to claim 53 above, and in further view of US 3,493,424 issued to Mohrlök et al.

Sugawara, Knowlton, Horie, and Pechhold do not teach the claimed silsesquioxane anti-soiling agent. However, said agent is well known in the art. For example, Mohrlök teaches a silsesquioxane treatment composition for imparting anti-slip properties and soil-resistance to fabrics (abstract). Thus, it would have been obvious to one skilled in the art to add the silsesquioxane anti-soiling agent as taught by Mohrlök to the Sugawara composition in order to further improve the soiling resistance of the finishing composition.

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9. Claim 40 is rejected under 35 USC 103(a) as being unpatentable over the cited Sugawara, Knowlton, Horie, and Pechhold references as applied to claim 53 above, and in further view of US 4,007,305 issued to Kakar et al.

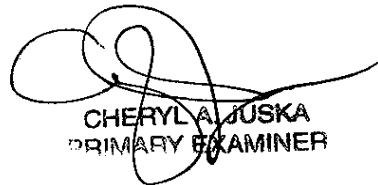
Sugawara, Knowlton, Horie, and Pechhold do not teach the claimed polyvinylpyrrolidone anti-soiling agent. However, said agent is well known in the art. For example, Kakar teaches a treatment composition containing said polyvinylpyrrolidone for imparting soil release and repellency to fabrics (abstract). Thus, it would have been obvious to one skilled in the art to add the polyvinylpyrrolidone anti-soiling agent as taught by Kakar to the Sugawara composition in order to further improve the soiling resistance of the finishing composition.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Cheryl Juska whose telephone number is 703-305-4472. The Examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



CHERYL A. JUSKA
PRIMARY EXAMINER

cj
October 20, 2003